

Natural Gas Infrastructure Reliability Industry Forums **Agenda**

Monday, September 16
NETL Morgantown

- 7:30 a.m. **Registration and Continental Breakfast**
- 8:00 a.m. **Welcome**
Rodney Anderson, Product Manager, U.S. Department of Energy,
National Energy Technology Laboratory
- 8:05 a.m. **Opening Remarks – The Future of Gas**
James A. Slutz, Deputy Assistant Secretary for Natural Gas & Petroleum,
U.S. Department of Energy
- 8:20 a.m. **Program Status**
Christopher Freitas, Natural Gas Analyst, Office of Natural Gas & Petroleum,
U.S. Department of Energy
- 8:35 a.m. **Forum Expectations**
Dan Driscoll, Project Manager, U.S. Department of Energy,
National Energy Technology Laboratory

Forum 1: Third Party Damage / Remote Monitoring / Leak Detection

- 9:00 a.m. ***Hyperspectral Radar Imaging***
Lawrence Livermore National Laboratory
- 9:30 a.m. ***Evaluation of Active/Passive Gas Imagers for Pipeline Remote Leak Detection***
Sandia National Laboratory
- 10:00 a.m. **Break**
- 10:15 a.m. ***Microwave Radar Sensing of Gas Pipeline Leaks***
Argonne National Laboratory
- 10:45 a.m. ***Detection of Unauthorized Construction Equipment in Pipeline Right of Ways***
Gas Technology Institute
- 11:15 a.m. ***Ultrasonic Measurement of Plastic Strain in Pipelines***
Pacific Northwest National Laboratory
- 11:45 a.m. **Group Lunch**

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Forum 2: Underground Detection

- 1:00 p.m. ***Detection of Subsurface Facilities Including Non-Metallic Pipe***
CyTerra Corporation
- 1:30 p.m. ***Capacitive Tomography for the Location of Plastic Pipe***
Gas Technology Institute
- 2:00 p.m. ***Micro-Power Impulse Radar (MIR) Demonstration for Pipe/Facilities Locator***
Lawrence Livermore National Laboratory
- 2:30 p.m. ***Differential Soil Impedance Obstacle Detection***
Gas Technology Institute

Forum 3: Compressor Technologies / Modeling

- 1:00 p.m. ***Laser Based Ignition***
U.S. Department of Energy, National Energy Technology Laboratory
- 1:30 p.m. ***Turbo-Compressor Direct Surge Control***
Southwest Research Institute
- 2:00 p.m. ***Retro-Fit Micro-Pilot Ignition System***
Colorado State University
- 2:30 p.m. ***Virtual Pipeline System Test Bed***
Kansas State University
- 3:30 - 5:30 p.m. **Poster Papers and NETL Tour (concurrently)**

Poster Session

- **Acoustic Detecting and Locating Gas Pipeline Infringement** - West Virginia University
- **In-line Compressor Technology** - Dresser-Rand
- **Demonstration: Detection of Subsurface Facilities** - CyTerra Corporation
- **Demonstration: Conformable Array** - Southwest Research Institute
- **Demonstration: Smart Pipe** - Idaho National Engineering Laboratory
- **Demonstration: "Pipe Explorer" Untethered Robot** - NYGAS
- **Demonstration: Micro-Power Impulse Radar Facilities Locator** - Lawrence Livermore National Laboratory
- **Direct Assessment Methodology Study and Guidelines** - Gas Technology Institute
- **Circumferential MFL Technology Study** - Gas Technology Institute
- **Strain-based Design of Pipelines** - Edison Welding Institute and Minerals Management Service
- **Environmental Laser Mapping Project** - LaSen

Tours of NETL Research Facilities

3:30 and 4:30

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West Virginia University - National Research Center for Coal & Energy

7:30 a.m. **Registration and Continental Breakfast**

8:00 a.m. **Welcome**
Rodney Anderson, U.S. Department of Energy, National Energy Technology Laboratory

Forum 4: Monitoring and Repair Technologies

8:15 a.m. ***Conformable Array***
Southwest Research Institute

8:45 a.m. ***Electro-Chemical Noise Sensors for Detection of Corrosion of Pipelines***
Albany Research Center

9:15 a.m. ***Environmentally Benign Microbial Inhibitor***
Gas Technology Institute

9:45 a.m. ***Monitoring Technology for Internal Corrosion Detection***
Southwest Research Institute

10:15 a.m. **Break**

10:30 a.m. ***“GASNET” Gasoline Sensor Network System***
Automatika, Inc.

11:00 a.m. ***Sealing Cast Iron Pipe Joints under Live Conditions***
Gas Technology Institute

11:30 a.m. ***“Smart Pipe” Integral Communication, Damage Detection and Multiple Sensor Application in Pipelines***
Idaho Engineering and Environmental Laboratory

12:00 p.m. **Group Lunch**

Forum 5: Advanced Inspection Technologies

1:00 p.m. ***Sensor Development for the IPP Robotic Vehicle***
Sandia National Laboratory

1:30 p.m. ***“Pipe Explorer” Untethered Robot***
NYGAS

2:00 p.m. ***Multi-Frequency Multi-Purpose Acoustic Sensor***
Los Alamos National Laboratory

2:30 p.m. ***Acoustic Wave Pipe Inspection System***
Oak Ridge National Laboratory

3:00 p.m. **Break**

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West Virginia University - National Research Center for Coal & Energy

- 3:15 p.m. ***Non-Linear Harmonic Sensors for Detection of Mechanical Damage***
Southwest Research Institute
- 3:45 p.m. ***In-Line Inspection System for Detection, Discrimination, and Grading of Stress Corrosion Cracking (SCC) in Pipelines***
Tuboscope Pipeline Services
- 4:15 p.m. ***Circumferential Magnetic Flux Leakage (MFL) In-Line Inspection***
Battelle Memorial Institute
- 4:45 p.m. **Closing Comments**